

### **REMARKS**

Claims 1-39 are pending in the application. Claims 1-39 were rejected. Claims 1-39 are canceled. Claims 40-80 are added. Claims 40 and 67 are the independent claims. Reconsideration of the amended application is respectfully requested.

The Examiner rejected claims 2-5, 11, 12, 14-17, 23, 24, 28-31, and 37 under 35 USC §112, first paragraph, as including subject matter that was not described in the specification in such a way as to enable one of skill in the art to make or use the invention. The Examiner asserted that no structural features are disclosed in the specification that would enable the limitation that the NMR scanning device is partially collapsible and expandable horizontally. Claims 2-5, 11, 12, 14-17, 23, 24, 28-31, and 37 are canceled, rendering the rejection moot. The newly-submitted claims use language that supported by and enabled in the written description.

The Examiner rejected claims 12, 24, and 37 under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicants regard as the invention. The Examiner asserted that the phrase “educational and promotional materials” is very broad, and does not define the structural elements that are intended to be encompassed by the claims. Claims 12, 24, and 37 are canceled, rendering the rejection moot. It is submitted that the newly-submitted claims use language that is definite.

The Examiner noted that there is insufficient antecedent basis for the limitation “said trailer” recited in claim 38. Claim 38 is canceled.

The Examiner rejected the originally-submitted claims under 35 USC §103(a) as being unpatentable over Liberman, in view of Crowley et al., and in some cases further in

view of various combinations of the teachings of Migurski et al., Fernandez, Sheehan et al., Lysyansky et al., Hegedus, and Spitzer et al. These references are discussed below.

Liberman

Liberman discloses a carrying case for a display board that carries information and product samples. The carrying case is brought to potential customers on a mobile vehicle, such as a trailer or truck. The carrying case includes display boards and product samples, and electrical display components. Liberman does not disclose transporting an operational system for sale to a location for viewing by potential customers, where operation of the system can be demonstrated and simulated for the potential customers.

Crowley et al.

Crowley et al. disclose a remotely positioned MRI system. Crowley et al. disclose that the MRI system is compact and remotely positionable, but do not disclose such a system that is portable. The Crowley et al. system is not able to be made portable, and it is not known to make MRI systems portable. It is also not known to make MRI scanners that are operational mock-ups, that is, that are demonstration models only, utilizing simulations and audio-visual material.

Further, it is not known how the teachings of Liberman, who discloses a carrying case for transporting and displaying sales information and product samples in a mobile sales unit, would be combined with the teachings of Crowley et al., who teach a functional MRI scanning system that is remotely positioned. Even if these teachings could be combined, it would be improper to do so because there is no motivation provided in either reference that would prompt one of ordinary skill in the art to combine these disparate teachings. Further, such combination still would not provide a mobile

In summary, Migurski et al. do not disclose the recited element, namely, an expandable MRI scanner, as asserted by the Examiner. Further, there is no motivation for one of skill in the art to combine the teachings of this reference with the other cited references. Still further, the reference itself is not applicable to the claimed invention, such that use of this reference as part of any combination in an attempt to render obvious the claimed invention would be improper.

Fernandez

Fernandez discloses a mobile movie cinema, housed in a trailer that extends outwardly in its operational configuration. However, no MRI scanning system is disclosed, and there is no motivation in any of the cited references to combine the teachings of this reference with the teachings of any other reference in an attempt to render obvious the claimed invention.

Sheehan et al.

Sheehan et al. disclose a prescription-controlled data collection system. The system passes prescription information and other medical information to a server, via a base unit. This information can be provided by a patient through the use of a data collect device. The passage cited by the Examiner discloses that the data collect device can communicate with the base unit over any of a number of communication channel means, including via wireless infrared communication. However, no other aspects of the claimed invention are disclosed, and no motivation is provided in any of the references to combine this feature of the prior art with the teachings of any of the other references. Only a communications channel is shown; no medical equipment is disclosed, or controlled by wireless link.

Lysyansky et al.

Lysyansky et al. disclose an ultrasound training system, which retrieves and displays previously-stored ultrasound data to simulate an ultrasound scanning session. Thus, an ultrasound session is simulated in a way that personnel can be trained under supervised conditions. However, Lysyansky et al. do not disclose such a system as applied to an MRI scanning system, nor do they disclose that such a system can be made portable, nor do they disclose or suggest any motivation for making such a system portable. Such motivation or suggestion is also not provided in any of the other cited references. The system of the claimed invention can be used for training purposes, but is also claimed for use in demonstrating system use for prospective customers of the system, and for assuaging anxiety that might be experienced by patients who might benefit from use of the system. As described in the application, medical personnel frequently are not aware of the advances made in MRI scanning systems, or are not fully apprised of these advances through a reading of trade literature. Further, many patients have misunderstandings about the lack of comfort experienced during an MRI scanning session. Both of these groups can benefit through an in-person demonstration of an MRI system, even if this system is a mock-up, that is, if the system merely simulates genuine operational conditions. A reading of the Lysyansky et al. reference does not give one the indication that an ultrasound procedure would be difficult for an ultrasound professional to grasp, nor that such a procedure might cause anxiety in a patient. Other than for training purposes in a medical facility at which such procedures would actually take place, Lysyansky et al. offer no motivation for its use. That is, there is no suggestion in the reference to one of skill in the art that the disclosed system should be made portable.

Further, there is no suggestion in this or any of the other cited references that the teachings of this reference should be applied to an MRI scanning system, mobile or otherwise.

Hegedus

Hegedus discloses a mobile exhibition unit. The unit is constructed on a trailer, and has a transport configuration and a stationary configuration. The transport configuration is compact, and has panels and sections that fold out and expand to assemble the stationary configuration. In its expanded state, the interior can be used to house an exhibit. The exhibition unit has multiple entrances. However, there is no teaching or suggestion that this invention is suitable for use with a MRI scanning system.

Spitzer et al.

Spitzer et al. disclose a method of conducting marketing research by using videotaped productions. According to this invention, a product description or advertisement is recorded on videotape, and presented once only to members of a target group. The group is then given a written questionnaire to answer. The responses to the questionnaires are used to evaluate the effectiveness of the videotaped presentation. Providing questionnaires following the presentation of a live demonstration of the product is not disclosed.

In summary, these references are derived from various disparate fields of use, and most are not compatible in their teachings such that these teachings could be combined for any reason. In fact, no such reason is suggested in any of the references, and there is no motivation for such combination provided to one of skill in the art. Further, even if these teachings were combined, certain aspects of the claimed invention are not disclosed

in any of the references, and therefore such combination would still be unable to render obvious the claimed invention. For example, none of the references teaches a portable MRI scanning system, and none of the references teaches an MRI scanning device that simulates an actual, operational MRI scanner. For at least the foregoing reasons, no combination of the teachings of the cited references could render obvious the claimed invention. The rejections, therefore, should be withdrawn.

Based on the foregoing, it is submitted that all rejections have been overcome. It is therefore requested that the Amendment be entered, the claims allowed, and the case passed to issue. Additional claims are presented in this Amendment. A check is submitted herewith, in payment of the fee for the excess claims. If the check is missing, or made out for an insufficient amount, please charge any deficiency to our deposit account, No. 501998, and notify us accordingly.

August 30, 2002

Date

TMC:lep

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

40. A portable nuclear magnetic resonance imaging demonstration system,  
comprising:  
a transport vehicle having a platform;  
a scanner device, disposed on the platform; and  
control equipment, disposed on the platform;  
wherein the scanner device simulates an operational magnetic resonance imaging  
scanner, under control of the control equipment.

41. The system of claim 40, wherein the transport vehicle includes an enclosure  
that encloses at least a portion of the platform.

42. The system of claim 41, wherein the enclosure encloses the scanner device  
and the control equipment.

43. The system of claim 40, wherein the control equipment is connected to the  
scanner device by conductive wiring.

44. The system of claim 40, wherein the control equipment communicates with  
the scanner device by wireless link.

45. The system of claim 44, wherein the wireless link is an infrared link.
46. The system of claim 40, wherein the control equipment simulates MRI diagnostic equipment.
47. The system of claim 40, wherein the transport vehicle further includes a presentation area, wherein operation of the scanner device can be witnessed by observers disposed in the presentation area.
48. The system of claim 47, wherein the presentation area includes an image display.
49. The system of claim 48, wherein the image display is connected to the control equipment, to display scan images.
50. The system of claim 49, wherein the scan images are previously-recorded scan images.
51. The system of claim 47, wherein the presentation area includes audio/visual equipment.
52. The system of claim 47, further including a network access point.



53. The system of claim 41, wherein the enclosure has at least one access door, for allowing admittance to the inside of the enclosure.

54. The system of claim 40, wherein the scanner device is expandable laterally.

55. The system of claim 54, wherein the scanner device is substantially the same size as an operational MRI scanner, when the scanner device is expanded.

56. The system of claim 54, wherein the scanner device is expandable to an extent that at least a portion of the scanner device overhangs the platform.

57. The system of claim 56, wherein the transport vehicle includes an enclosure that encloses at least a portion of the platform, and the enclosure includes at least one opening to accommodate the at least a portion of the scanner device that overhangs the platform.

58. The system of claim 56, wherein the platform includes at least one extension that, when extended, supports the at least a portion of the scanner device that overhangs the platform.

59. The system of claim 58, further including a stand, disposed on the ground below the extension, which supports the weight of the extension.

60. The system of claim 59, wherein the stand is adjustable in height.

61. The system of claim 60, wherein the stand is a rod having a threaded end attached to the extension.

62. The system of claim 57, further including an overhang panel that extends from the enclosure to at least partially overhang the scanner device when the at least a portion of the scanner device overhangs the platform.

63. The system of claim 57, wherein the enclosure includes an enclosure bay that retractably extends to at least partially enclose the at least a portion of the scanner device that overhangs the platform.

64. The system of claim 63, further including a stand, disposed on the ground below the extension, which supports the weight of the extension.

65. The system of claim 64, wherein the stand is adjustable in height.

66. The system of claim 65, wherein the stand is a rod having a threaded end attached to the extension.

67. A method of demonstrating operation of a nuclear magnetic resonance imaging system, comprising:

disposing a scanner device and control equipment on a platform;  
connecting the platform to a transport vehicle;  
transporting the platform to a location of interest; and  
causing the scanner device to simulate an operational magnetic resonance imaging scanner, under control of the control equipment, at the location of interest.

68. The method of claim 67, wherein the location of interest is a medical facility.

69. The method of claim 67, wherein the platform includes a presentation area.

70. The method of claim 69, further comprising admitting viewers into the presentation area.

71. The method of claim 70, wherein the viewers are any of hospital administrators, medical technicians, physicians, and potential patients.

72. The method of claim 67, further comprising providing a visual presentation of a scanning sequence.

73. The method of claim 72, wherein the visual demonstration is a true representation of an operation of the scanner device.

74. The method of claim 72, wherein the visual demonstration is a pre-recorded representation of a scanning sequence.

75. The method of claim 67, wherein the control equipment simulates magnetic resonance imaging scanner diagnostic equipment.

76. The method of claim 67, further comprising disposing informational material relevant to the simulated scanner.

77. The method of claim 67, further comprising disposing marketing material relevant to the simulated scanner.

78. The method of claim 68, further comprising:  
distributing questionnaires to the viewers;  
asking the viewers to respond to questions on the questionnaire;  
retrieving questionnaire responses;  
analyzing the responses; and  
determining whether changes should be made to either of the simulated scanner and scanner marketing material, based on the analysis.

79. The method of claim 68, wherein the viewers are medical technicians, further comprising allowing at least one of the medical technicians to operate the control equipment.

80. The method of claim 68, wherein the viewers are potential patients, further comprising allowing at least one of the potential patients to enter a scan space of the scanner device.